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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/815,539

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Priya Rajagopal

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EXAMINER

KANE, CORDELIA P

ART UNIT

PAPER NUMBER

2432

MAIL DATE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/815,539	<b>Applicant(s)</b> RAJAGOPAL ET AL.	
	<b>Examiner</b> CORDELIA KANE	<b>Art Unit</b> 2432	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 August 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1 – 25 have been considered but are moot in view of the new grounds of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1 – 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coss in view of Moir's US Publication 2002/0120720 A1 in view of Venkatachary, and further in view of Katz.

4. Referring to claims 1, 9, and 18, Coss discloses:

- a. Receiving state rules (column 4, lines 4-6).
- b. Forming a set of rules including at least one condition and one action (column 4, lines 30-34).
- c. Storing a set of rules in tabular form(column 4, lines 5-6).
- d. Receiving a network flow including a plurality of packets (column 6, lines 29-30, Figure 5, element 501).
- e. Applying the state rules to the plurality of packets in the network flow (column 6, lines 18-21).
- f. Wherein the at least one action comprises instantiation of a rule for the network flow from the set of rules (column 4, line 48).

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5. Coss does not explicitly disclose expressing rules in a text format and converting them into a binary format. However, Moir discloses receiving the rule file in text format and converting it into a binary format (page 6, paragraph 72). Coss and Moir are analogous art because they are from the same field of endeavor, rules. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Coss and Moir before him or her, to modify the system of Coss to include the text to binary of Moir. The suggestion/motivation for doing so would have been so that the rules may be supported by the virtual machine (page 5, paragraph 58).

6. Coss in view of Moir does not explicitly disclose there being a database of filters, where a specific filter is selected. However Venkatachary discloses a database of filters or rules (column 8, lines 16-17) and selecting a filter (column 8, lines 56-57). Coss in view of Moir and Venkatachary are analogous art because they are from the same field of endeavor, filtering. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Coss in view of Moir and Venkatachary before him or her, to modify the method of Coss in view of Moir to include the database of filters of Venkatachary. The motivation for doing so would have been to provide traffic sensitive routing (column 2, lines 21-22).

7. Coss in view of Moir in view of Venkatachary does not explicitly disclose passing the definitions as a state machine. However, Katz discloses that state machines are critical for realizing the control and decision making logic in digital systems (page 383, 2<sup>nd</sup> paragraph).

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8. Katz and Coss in view of Moir in view of Venkatachary are analogous art because they are from the same field of endeavor, digital systems. At the time of the invention, it would have been obvious to one of ordinary skill in the art, having the teachings of Coss in view of Moir in view of Venkatachary and Katz before him or her, to modify Coss in view of Moir in view of Venkatachary to include the state machine of Katz. The motivation for doing so would have been that state machines are critical for realizing the control and decision making logic in digital systems (page 383, 2<sup>nd</sup> paragraph).
9. Referring to claims 2, 3, 10, 11, 19 and 20, Venkatachary teaches analyzing the application layer context (column 5, lines 60-62).
10. Referring to claims 4, 12, and 21, Coss teaches wherein the filter comprises a dynamic filter (column 8, lines 27-30).
11. Referring to claims 5, 13, 22, Coss teaches wherein the filter comprises a static filter (Figure 3). Static rules are defined in applicant's specification as a rule that applies to aggregate flows. In Figure 3, all flows from A to B of type FTP are Passed.
12. Referring to claims 6, 14, and 23, Coss teaches saving the result of the at least one action for use in a later executed rule (column 5, lines 40-42). It is noted that applicant argues that Coss does not teach saving the result of the at least one action for use in a later executed rule. However, Coss teaches that the results of the rule are stored in cache and that the results of the rule are then applied to a later received similar packet that would have used that same rule (column 5, lines 40-50).

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13. Referring to claim 7, Katz teaches that the state is maintained based on the state table (page 385). Coss teaches maintaining a state table of saved results (column 5, lines 38-55). Therefor Coss in view of Katz teaches maintaining an expected state utilizing the saved results.

14. Referring to claims 8, 16, and 25, Coss teaches activating a rule (column 8, lines 13-15). Referring to claims 15, and 24, Coss teaches deactivating a rule (column 8, lines 36-38).

15. Referring to claim 17, Coss teaches maintaining a state table for the network flow (column 5, lines 38-55).

### ***Conclusion***

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CORDELIA KANE whose telephone number is (571)272-7771. The examiner can normally be reached on Monday - Thursday 8:00 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

/C. K./

Examiner, Art Unit 2432

/Gilberto Barron Jr/

Supervisory Patent Examiner, Art Unit 2432